

*Spaces, Worlds, and Grammar*. Edited by Gilles Fauconnier and Eve Sweetser. University of Chicago Press, Chicago. (1996). 355 pages. \$65.00, £51.95 (cloth); \$24.95, £19.95 (paper).

Contents:

Acknowledgments. 1. Cognitive links and domains: Basic aspects of mental space theory (Eve Sweetser and Gilles Fauconnier). 2. Mental spaces, constructional meaning, and pragmatic ambiguity (Claudia Brugman). 3. Analogical counterfactuals (Gilles Fauconnier). 4. Sorry, I'm not myself today: The metaphor system for conceptualizing the self (George Lakoff). 5. Subjective-change expressions in Japanese and their cognitive and linguistic bases (Yo Matsumoto). 6. Space accessibility and mood in Spanish (Errapel Mejías-Bikandi). 7. Cross-world continuity and the polysemy of adverbial *Still* (Laura A. Michaelis). 8. Alternate grounds in the interpretation of deictic expressions (Jo Rubba). 9. Roles and identificational copular sentences (Shigeru Sakahara). 10. Perspective and the representation of speech and thought in narrative discourse (José Sanders and Gisela Redeker). 11. Mental spaces and the grammar of conditional constructions. 12. Conceptual locations for reference in American Sign Language (Karen van Hoek). Index.

*Fuzzy Logic*. Edited by J. F. Baldwin. John Wiley and Sons, New York. (1996). 256 pages. \$64.95.

Contents:

Preface. List of figures. List of tables. List of contributors. 1. Recent developments in fuzzy logic and intelligent technologies (H.-J. Zimmermann). 2. Handling priority and preference in constraint satisfaction problems: A possibility theory-based approach (D. Dubois *et al.*). 3. Knowledge from data using Fril and fuzzy methods (J.F. Baldwin). 4. Mission management system for multiple autonomous vehicles (N.J.W. Rayner and C.J. Harris). 5. A fuzzy data browser in Fril (J.F. Baldwin and T.P. Martin). 6. Adaptive fuzzy systems for modelling static and dynamic processes (H. Bersini and V. Gorrini). 7. Fuzzy logic in diagnosis: Possibilistic networks (M. Uliuru). 8. Fuzzy linguistic reasoning and sentence interpretation (J.F. Baldwin and B.W. Pilsworth). 9. Customer segmentation for banks and insurance groups with fuzzy clustering techniques (R. Weber). 10. Tuning of fuzzy controllers: Case study in a column flotation pilot plant (M.T. Carvalho *et al.*). 11. Exploratory data processing using a fuzzy generalization of the GUHA approach (M. Holeña). 12. Fuzzy logic controller based on standard operational amplifiers (D. Kovačević and A. Kovačević). 13. Fuzzy sets and community transport (R.I. John and S.C. Bennett). Index.

*Partial Differential Equations: Methods and Applications*. By Robert C. McOwen. Prentice Hall, New Jersey. (1996). 419 pages. \$62.00.

Contents:

Preface. Introduction. 1. First-order equations. 2. Principles for higher-order equations. 3. The wave equation. 4. The Laplace equation. 5. The heat equation. 6. Linear functional analysis. 7. Differential calculus methods. 8. Linear elliptic theory. 9. Two additional methods. 10. Systems of conservation laws. 11. Linear and nonlinear diffusion. 12. Linear and nonlinear waves. 13. Nonlinear elliptic equations. Hints and solutions for selected exercises. References. Index. Index of symbols.

*Introduction to Practical Linear Programming*. By David J. Pannell. John Wiley & Sons, New York. (1997). 333 pages. \$59.95 (including diskette).

Contents:

Preface. 1. Introduction. 2. Graphical solution of linear programming. 3. Introduction to matrix construction. 4. Interpreting main output. 5. Examples and exercises. 6. Negative coefficients and negative factor levels. 7. Special techniques. 8. More examples and exercises. 9. Interpreting range analysis output. 10. Debugging your model. 12. Sensitivity analysis. 13. Representing risk and uncertainty. 14. Further practical issues. Appendix. Solutions to exercises. Glossary. References. About the software. Index.

*The B-Book: Assigning Programs to Meanings*. By J.-R. Abrial. Cambridge University Press, Cambridge, U.K. (1996). 779 pages. \$64.95.

Contents:

I. Mathematics. 1. Mathematical reasoning. 2. Set notation. 3. Mathematical objects. II. Abstract machines. 4. Introduction to abstract machines. 5. Formal definition of abstract machines. 6. Theory of abstract machines. 7. Constructing large abstract machines. 8. Examples of abstract machines. III. Programming. 9. Sequencing and loop. 10. Programming examples. IV. Refinement. 11. Refinement. 12. Constructing large software systems. 13. Examples of refinements. Appendices. A. Summary of notations. B. Syntax. C. Definitions. D. Visibility rules. E. Rules and axioms. F. Proof obligations. Index.

*Structure and Interpretation of Computer Programs*, (Second edition). By Harold Abelson and Gerald Jay Sussman with Julie Sussman. MIT Press/McGraw-Hill, Cambridge, MA/New York. (1996). 657 pages. \$55.00.

Contents:

Contents. Foreword. Preface to the second edition. Preface to the first edition. Acknowledgments. 1. Building abstractions with procedures. 2. Building abstractions with data. 3. Modularity, objects, and state. 4. Metalinguistic abstraction. 5. Computing with register machines. References. List of exercises. Index.